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EXAMINER

HOYE, MICHAEL W

ART UNIT	PAPER NUMBER
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2623

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Arguments

1. Applicants' arguments originally filed on January 20, 2006 and entered on May 16, 2006 have been fully considered but they are not persuasive.

Regarding the Zdepski reference, as related to new independent claims 39 and 48, the Applicants argue that, "...pasting one picture into another is not the same as the claimed slice encoding of different regions that form a music interface, because no pasting is done. Specifically, each region is separately slice-encoded at the headend and then recombined to form the music interface for display at the set top terminal. The claimed recombined regions are different that the background and pasted insert picture of Zdepski. Furthermore, the division of frames into a grid of squares in Zdepski is different that the claimed slice-encoded regions, because [the] regions are functional...while the grid is based on pixels."

In response, the Examiner respectfully disagrees with the Applicants because the claimed sliced-encoded regions are the same as the encoded slices which may be inserted or overlaid on the background picture as disclosed in the Zdepski reference. As previously stated and disclosed in the Zdepski reference, "the MPEG standard defines a slice as a contiguous sequence of 2 or more macroblocks (16x16 pixel blocks) that begin and end on the same row of macroblocks" (see col. 2, lines 30-39 and col. 10, line 66 – col. 11, line 36). Therefore, according to the MPEG standard, slices are made up of pixel blocks. In addition to, Zdepski further discloses that the insert picture or overlay slices may comprise images or pictures representing portions of a GUI or a display portion of the GUI, including audiovisual content or programming (col. 4, line 51 –

Art Unit: 2623

col. 5, line 18). The “display portion of the GUI” may include one or all of the displayable elements of a GUI, such as buttons, dials, knobs, slider bars, text boxes, switches, numeric values, graphs, charts or other types of GUI elements or controls/indicators, which form part of all of a user interface (col. 5, lines 2-6). Furthermore, the “display portion of the GUI” is also intended to include both GUI input elements, for receiving input from a user, and GUI output elements, for display information to a user (col. 5, lines 7-10). Therefore, the regions or slices disclosed by Zdepski may be functional regions.

Regarding the Ellis reference, the Applicants argue that, “Ellis fails to teach or suggest any slice encoding at all.”

In response, the Examiner respectfully notes that the Ellis reference was not relied on to teach slice encoding and was used primarily to provide teaching regarding encoding a music interface in an interactive program guide. Therefore, the Applicants’ arguments are moot.

Regarding the Applicants’ arguments directed to the Hendricks reference on page 6. The Examiner respectfully notes that these arguments are moot since the Hendricks reference is no longer relied upon in this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 39-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al (US 2004/0117831), in view of Zdepski et al (USPN 6,606,746), both cited by the Examiner.

As to claim 39, note the Ellis et al reference which discloses a method for encoding a music interface in an interactive program guide (IPG) (see pg. 7 [0117]-[0119]). The claimed “encoding a plurality of music channel rows using slice-based encoding and transmission at a headend for recombination at a set top terminal (STT) for display in a music channel listing region” is met in part by Figures 53A and 53B of Ellis et al where a plurality of music channel rows (see 636 in Fig. 53A and 641 in Fig. 53B) are encoded and transmitted from the headend and combined at a set top terminal for display in a music channel listing as shown in the Figures (also see pg. 7 [0117]-[0119] and pg. 20 [0219] – pg. 21 [0224]). Ellis et al does not explicitly disclose the claimed encoding...using slice-based encoding. However, the Zdepski et al reference teaches an interactive television system and method for displaying a graphical user interface using insert pictures or slices using slice-based encoding. Zdepski et al notes that the MPEG standard defines a slice as a contiguous sequence of 2 or more macroblocks (16x16 pixel blocks) that begin and end on the same row of macroblocks (see col. 2, lines 30-39 and col. 10, line 66 – col. 11, line 36). Zdepski further teaches a graphical user interface (GUI) in an interactive television system that provides a compressed background picture (encoded guide graphics portion) which comprises a plurality of slices, and one or more compressed insert pictures (video portion) which comprise one or more slices (see col. 2, line 42 – col. 3, line 33 and col. 4, line 51 – col. 5, line 18). More specifically, Zdepski teaches in col. 4, line 51 – col. 5, line 18 that the insert picture or overlay slices may comprise images or pictures representing portions of a GUI or a display portion of the GUI, including audiovisual content or

Art Unit: 2623

programming. The “display portion of the GUI” may include one or all of the displayable elements of a GUI, such as buttons, dials, knobs, slider bars, text boxes, switches, numeric values, graphs, charts or other types of GUI elements or controls/indicators, which form part of all of a user interface (col. 5, lines 2-6). In addition to, the “display portion of the GUI” is also intended to include both GUI input elements, for receiving input from a user, and GUI output elements, for display information to a user (col. 5, lines 7-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the encoding of a music interface in an IPG of the Ellis et al reference with the Zdepski et al reference, which further teaches encoding video as slices using slice-based encoding for the advantages of saving transmission bandwidth, data processing, and data storage, since video data updates are smaller in size. One of ordinary skill in the art would have been led to make such a modification since using slice-based encoding provides additional efficiency for transmitting and processing video data as described above. The claimed “encoding a header region using slice-based encoding and transmission at the headend for recombination at the STT for display” is met in part by Ellis et al which discloses a header region “MUSIC CHANNELS” (see Fig. 53A) or “MUSIC VIDEO CHANNELS” (see Fig. 53B) as shown and described above. The “slice-based encoding” is met by the combination of Ellis and Zdepski as described above. The claimed “encoding a music channel description region using slice-based encoding and transmission at the headend for recombination at the STT for display” is met in part by Figures 53A and 53B of Ellis et al, as previously described above, where a plurality of music channel rows with a music channel description region (see 636 in Fig. 53A and 641 in Fig. 53B) are encoded and transmitted from the headend and combined at a set top terminal for display in a music channel

Art Unit: 2623

listing as shown in the Figures (also see pg. 7 [0117]-[0119] and pg. 20 [0219] – pg. 21 [0224]).

The “slice-based encoding” is met by the combination of Ellis and Zdepski as described above.

The claimed “wherein the music interface for display on the STT includes the music channel listing region, the header region, and the music channel description region” is met by Figures 53A and 53B of Ellis et al as described above.

As to claim 40, the claimed “encoding a plurality of audio streams for tuning at the STT, each audio stream associated with a music channel” is met by the music or audio channels of Ellis et al as described above (see pg. 7 [0117]-[0119] and pg. 20 [0219] – pg. 21 [0224]).

As to claim 41, the claimed “encoding a video region using slice-based encoding and transmission at the headend for recombination at the STT for display” is met in part by the “ALBUM COVER” video region 105 in Fig. 53A or the “MUSIC VIDEO” video region 105 in Fig. 53B of Ellis et al, and the “slice-based encoding...” is met by the combination of Ellis and Zdepski as described above.

As to claim 42, the claimed “wherein the music channel listing region includes a left display region and a right display region” is met by Figs. 53A-53B of Ellis, where the claimed “left display region” is met by channel listing 636 (Fig. 53A) or 641 (Fig. 53B), and the claimed “right display region” is met by the album cover video display window 105 (Fig. 53A) or the music video region 105 (Fig. 53B). In addition to, the Examiner notes that GUI display regions are merely a matter of design choice and may be implemented in various different ways as determined by the programmer or GUI designer.

As to claim 43, the claimed “wherein the right display region is the video region” is met by the Ellis et al reference as described above in claim 42.

As to claim 44, the claimed “wherein the header region is pre-loaded to a local memory of the STT” is met by Ellis et al as described on page 5 [0101], page 7 [0117], and page 21 [0223] (also see Fig. 1A) where IPG or GUI information, including the “header region” may be pre-stored in local memory of the set-top box 26.

As to claim 45, the claimed “wherein the music channel listing region includes a background having background strips encoded at the headend to generate a bitmap to be sent to the STT” is met in part by the combination of Ellis et al and Zdepski et al as described above. Zdepski teaches encoding background strips or slices at the headend and transmitting the slice structure for insertion at the set top box 140 (see col. 6, lines 43 – col. 7, line 21 and col. 11, lines 23-36 for example). Zdepski does not explicitly use the term “bitmap” but does describe the use of bit streams and slice maps as described in the sections cited above. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive program guides to use bitmaps for the transmission and display of GUI images for the advantage of using a well-known standard display format which is easily portable between different platforms, and may be easily compressed and processed using MPEG processing. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have used “bitmaps” for the advantages given above.

As to claim 46, the claimed “wherein the background strips are stored in a local memory of the STT” is met by Ellis et al as described on page 5 [0101], page 7 [0117], and page 21 [0223] (also see Fig. 1A) where IPG or GUI information, including the “background strips” may be pre-stored in local memory of the set-top box 26.

As to claim 47, the claimed “wherein the music interface is sent via one transmission channel” is met by col. 7, lines 5-50). Also see pg. 21 [0221]-[0224] of the Ellis et al reference where the interface may be sent via one transmission channel.

As to claims 48-56, the claims are met based on similar grounds as the rejection of claims 39-47 as described above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

Art Unit: 2623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

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Art Unit: 2623

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Michael W. Hoyer
July 24, 2006



JOHN MILLER
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